

ROUTE 1 NATIONAL AIRPORT OVERPASS

George Washington Memorial Parkway, Route 1 at National Airport

Arlington Vicinity

Arlington County

Virginia

HAER No. VA-85

HAER
VA
7-ARLV,
12-

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

National Park Service

Department of the Interior

P.O. Box 37127

Washington, D.C. 20013-7127

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I. INTRODUCTION

Location: George Washington Memorial Parkway (GWMP) milepost 12.71 1.6 miles from Interstate 395; carries U.S. Route 1 - National Airport over GWMP in Arlington County, Virginia.

FHWA Structure No.: 3300-028P.

Date of Construction 1965.

Type: Reinforced concrete multiple box rigid frame bridge.

Designer: Bureau of Public Roads with approval from the National Park Service (NPS).

Present Owner: National Capital Region, National Park Service.

Present Use: Carries vehicular traffic over the GWMP to National Airport.

Significance: Provides the primary access for commercial traffic to National Airport over the GWMP.

Project Information: Documentation of the George Washington Memorial Parkway and Clara Barton Parkway was undertaken as a multi-year project by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER), a combined division of the National Park Service, Robert Kapsch, Chief. The project was sponsored by the Park Roads Program of the National Park Service, John Gingles, Deputy Chief, Engineering and Safety Services Division. The Project Supervisor was Sara Amy Leach, HABS Historian. Bridge reports were prepared by Elizabeth M. Nolin (1988); Michael P. Kucher (University of Delaware, 1993); and Jennifer P. Wentzien (University of Washington, 1994).

HABS Report No. VA-69 prepared by Timothy Davis (University of Texas) provides an overview history of the entire parkway project. Jack E. Boucher and Jet Lowe produced the large-format photographs. The Washington-based summer 1994 documentation team was headed by landscape architect Tim Mackey (Harvard University, Graduate School of Design).

II. DESCRIPTION

The Route 1 - National Airport Exit Overpass was built in 1965 to provide access from Route 1 to National Airport over the George Washington Memorial Parkway (GWMP). Unlike the GWMP, Route 1 is open to commercial traffic and provides an important link to National Airport.

The architectural design of the bridge is a modified version of earlier stone-faced bridges by Gilmore Clarke. The most notable differences between this design and those by Clarke are the absence of stone facing on the arched span and the use of a metal railing rather than a stone parapet. William D. Haussmann is listed as the National Park Service architectural designer. The bridge was constructed on the same contract as the South Airport Exit Overpass (HAER No. VA-84). The two bridges employ the concept of the rigid frame slightly differently. The Route 1 Overpass is actually a box type rigid frame while the South Airport Exit Overpass is a solid frame such as employed elsewhere on the GWMP (i.e. see Wellington Overpass and the Shirley Highway Overpasses).

Description

The Route 1 - National Airport Overpass is a single span skewed rigid frame arch bridge. The bridge is spans 120'. The overall length including wing walls is 220'. The deck is 79' wide including 5'-6" cantilevered sidewalks. The foundations are 14" diameter precast prestressed concrete piles. The spread footing is cast integrally with the rigid frame above. The vertical legs of the frame are reinforced concrete and the span is a box structure. The box structure is approximately 8' deep at supports, tapering to approximately 3' at midspan. Cell walls are 6" thick. The roadway is a specified as a 2" thick bituminous surface over the box structure. Drawings call for the exposed surfaces of the frame was given a rubbed finish with wet burlap sacks. Reinforced concrete wing walls are stone faced. A local class "A" masonry is specified except for corner quoins which are dimensioned granite masonry with a rock-face finish. A standard NPS steel post and railing was specified.¹

III. SOURCES

U.S. Department of the Interior, Historic American Buildings Survey (HABS), No. VA-69, "George Washington Memorial Parkway," 1994. Prints and Photographs Division, Library of Congress, Washington D.C.

U.S. Department of Commerce, Bureau of Public Roads. Plans for Proposed Project 1A7. Microfiche reductions of original construction drawings on file at National Capital Region Park Headquarters, National Park Service, Washington D.C.

_____. "Final Construction Report, George Washington Memorial Parkway, Project 1A7," 1965. Unable to locate report at the remote storage facility of the Eastern Federal Lands Division, Federal Highway Administration, Sterling, Virginia.

¹Bureau of Public Roads, Plans for "Bridge under viaduct connection to Washington National Airport: Project 1A7."